aim was to investigate that curcumin can influence the early phase of fibrogenesis in animal model of fibrosis induced by carbon tetrachloride, to investigate whether curcumin could act mainly by direct action on cultured rat hepatic stellate cells in vitro, and thus to estimate the posibilities as a candidate for therapeutics agent of hepatic fibrosis.
Methods : Effects of curcumin were investigated by histological and immunohistochemical examination in a carbon tetrachloride model of hepatic fibrosis in rats . Futhermore we also examined the effects of curcumin on cultured rat hepatic stellate cells, which play an important role in the pathogenesis of hepatic fibrosis, activation to investigate whether it could act mainly by direct action on hepatic fibroblastic cells.
Results : Histological and Immunohistological examination showed that curcumin reduced the accumulation of collagen and the number of smooth muscle alpha actin positive-stellate cells in the liver. In *in vitro* study, Moreover, curcumin reduced platelet derived growth factor-induced proliferation, smooth muscle-alpha actin expression, collagen synthesis in a dose-related manner in cultured rat hepatic stellate cells.
Conclusins : These results indicated that curcumin can inhibit hepatic fibrosis as a potent inhibitor of hepatic stellate cells and thus may become a valuable anti-fibrogenic agents

[PE1-27] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Transferrin as a targeting ligand for DNA/cationic liposome complex

Joo SY°, Oh EJ, Kim JS

College of Pharmacy, Sookmyung Women's University

Among the promising cancer therapy is targeting of the drug to tumor cells via receptor specific ligands. The use of cationic liposomes as nonviral vehicles for gene delivery is becoming increasingly prevalent in the field of gene therapy. Transferrin(Tf) has been used as a ligand for delivering liposomes mostly due to the increased number of transferrin receptors(TfR) found on tumor cells as compared to normal cells. Liposomes were prepared by reverse-phase evaporation method using dimethyldioctadecyl amoniumbromide(DDAB), cholesterol(Chol), and maleimide delivatized phospholipid(MPB-PE). Tf was conjugated to liposomes via the reaction of a MPB-PE with a thiol introduced into the protein by a heterobifunctional cross-linking agent, N-succimidyl-3-(2-pyridyldithio)propionate(SPDP). Physico-chemical characterization of Tf-liposomes was done using scanning electron microscope(SEM), transmission election microscope(TEM) and zeta-sizer. Mean diameter of liposome or Tf-liposome was about 150nm. The transfection efficiency of Tf-liposome mesured by β-galactosidase expression from pCMVβ-gal in HeLa cells was compared to Lipofectin by using 5-bromo-4-chloroindol-3-yl beta-D-galactopyranoside ('X-Gal') staining and chlorophenol red beta-D-galactopyranoside.

[PE1-28] [10/19/2000 (Thr) 15:00 - 16:00 / [Hall B]]

Preparation and Characterization of Poly(D,L -lactide-co-glycolide) Microspheres containing PEGylated Peptide

Kim BM°, Lee BH, Na DH, Park MO, Lee KC

Drug Targeting Laboratory, College of Pharmacy, SungKyunKwan University

Biodegradable poly(D,L-lactide-co-glycolide) (PLGA) microspheres containing polyethylene glyco (PEG)-modified peptides were prepared by solvent evaporation/extraction method. Insulin and salmon calcitonin were used as model peptides, which were bioconjugated with succinimidyl succinate monomethoxy-PEG (SS-mPEG) to improve biological stability. The release test was